United States
Department of
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Natural Resources
Conservation
Service

Grazing Land Management
Livestock Distribution

NE Fact Sheet-4

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What

One of the prime objectives of range management program is to distribute livestock, as well as possible, over an entire pasture and obtain uniform grazing of the vegetation. The problem is that livestock prefer to graze the more accessible areas close to the water source and on platter slopes. Unless forced to do otherwise, they will continue to graze these preferred areas. Such grazing patterns will result in portions of the pastures being overgrazed and other portions lightly grazed.

Why

When livestock are allowed to follow their natural habits, the forage yield in some areas will continue to decrease because of overgrazing, and useable forage on the less accessible areas may be ungrazed and wasted. Where good distribution occurs, more of the available forage plants in a pasture are grazed, and overgrazing of the easily accessible plants is reduced. A rancher must look at each pasture to insure that the animals are grazing uniformly.

Distribution Factors

Several factors influence the way livestock graze a pasture. These may include:

- Water locations – Generally cattle dring water at least once or twice a day. They may drink more often depending on the temperature. Therefore, the location of water supplies within a pasture has a significant effect on grazing patterns.

- Class of animal – Yearlings and young cows and bulls will traverse steeper slopes than older animals. Young animals will also trail along fencelines in a large group causing large trails. Fence placement is critical if young animals are grazing

- Slope – Older animals have trouble walking and grazing on steeper slopes. Therefore, they will tend to avoid steeper areas of rangeland and spend more time on level to lower sloped areas.

- Shaded or protected areas – Animals seek shelter from the cold, heat, and high winds. Prevailing wind direction and intensity have an effect on grazing distribution. Areas of a pasture that provide shelter with plant cover or topography are used more during periods of temperature extremes or high wind.

- Exposure – West and south facing slopes are warmer and may be used more on cooler days or in the winter. East and north facing slopes are cooler and may be sued more often on warmer days.

- Season of use – Some areas of a pasture are attractive to livestock because of the growing vegetation. Animals seek the most palatable plants growing at the time. For example, they are attracted to cool season plants during the spring and fall. The location of the different plants within a pasture and the time of year that these pastures are grazed often has an influence on the grazing pattern.

Methods to Control Distribution

There are many ways to control livestock distribution within pastures. These may include the folowing:

- Grazing systems – Every grazing system has an effect on livestock distribution. Concentrating livestock into larger herds and rotating the herds through two or more pastures tends to improve grazing distribution for each pasture. An ideal situation is when distribution and utilization are maximized with the producer's resources. Proper stocking rate is critical in achieving the ideal balance.

- Water development – In larger pastures, where animals have to walk a great distance to a water source, the development of a new water supply may improve distribution.

- Fencing – With the development of lower cost fencing, new fences to control animal movement are now practical. Small pastures generally improve distribution. Separating pastures by range sites will improve use on the steeper slopes. Also a temporary fence may be installed to hold cattle to one part of a pasture. Temporary fence can also be used to determine the best fence location for the type of cattle in the pasture.

- Trails – Where natural barriers occur, the construction of trails or driftways can open up new areas of pasture grazing.

- Salt or feed locations – Moving the location of salt or feed bunks may cause animals to increase grazing on lightly used areas of a pasture.

- Animal herding – Drifting or herding animals from heavily used to lightly used pasture can help to redistribute the grazing pressure.

- Brush management – When planning the control of trees or large shrubs, leave clusters of brush to provide necessary shelter. By locating these clusters in predetermined areas, they may draw livestock during periods when shelter is needed. It may also encourage grazing in nearby open areas. However, livestock will often avoid areas with thick brush and will forage in open prairie areas. Therefore, plan and evaluate the effects of brushy areas on livestock distribution.

- Mowing, haying or burning – These practices will attract livestock to the area when the grass begins regrowth. The timing of haying and burning needs to coincide with the grazing system to allow for adequate regrowth after removal and prior to grazing to ensure plant health is not compromised. Fore more information see Fact Sheet 14 (Mowing and Haying as a Management Tool) and Fact Sheet 12 (Prescribed Burning).

Other practices such as water spreading or fertilizing may also control livestock distribution. Keep in mind that anything you do in a pasture will have an impact on livestock distribution. The results should be analyzed before you apply any range practice to insure that it will produce a positive effect on grazing and will result in higher plant and animal production. Also, cost-effectiveness of the practice should be evaluated before installing. There may be a better way to improve distribution at a lower cost.

Where to Get Help

For more information on range, hay and pasture management, contact the local office of the U.S. Department of Agriculture's Natural Resources Conservation Service. It is listed in the telephone directory under "U.S. Government."